REMARKS

The Office Action dated June 13, 2006 has been received and carefully noted. The above amendments to the claims, and the following remarks, are submitted as a full and complete response thereto. No new matter has been introduced via the above noted amendments and no new claims are presented, and therefore, claims 1-15 are pending and submitted herewith for consideration.

Claims 1 and 7 were objected to for informalities in the Office Action. Applicants have amended claims 1 and 7 to address the informalities, and therefore, reconsideration and withdrawal of the objections is respectfully requested.

Claim 8 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicants have amended claim 8 to address the rejection, and therefore, reconsideration and withdrawal of the rejection is respectfully requested.

Claims 1-7 stand rejected under 35 U.S.C. §103(a) as being obvious over *Hwang* (EP 0981229 A2) in view of *Yao* (U.S. Patent No. 6,785,262). The Office Action took the position that *Hwang* teaches each and every element recited in claims 1-7, except for the controller, wherein the indication is a coded value of a length of the data queue. However, the Office Action cites to *Yao* as teaching this feature, and as such, the Office Action concluded that it would have been obvious to one of ordinary skill in the art to have combined the teaching of the references to generate Applicants' claimed invention.

Applicants traverse the rejection and respectfully submit that the cited combination of references, when taken alone or in combination, fails to teach, show, or suggest each and every limitation recited in claims 1-7.

Independent claim 1, the independent claim from which claims 2-7 depend, recites method of controlling communication resources. The method includes monitoring an indication of future need of communication resources in said first network element, sending the indication from the first network element to the controller, wherein the indication is a coded value of a length of a data queue, controlling the communication resources between the first network element and the second network element based on this indication, and controlling communications resources in a transmission from the first network element to the second network element, wherein the communication resources are allocated by a controller.

Hwang is directed to controlling asymmetric dynamic radio bearers in mobile packet data communications. *Hwang* discloses a media access controller (MAC), which is a part of the mobile station (see Figure 1). The MAC examines the amount of data stored in a transmit buffer during transmission of mobile packet data in order to increase or decrease the number of the plural radio bearers established, and for establishing a plurality of radio bearers used to send the transmit data at a data rate corresponding to the radio data service (column 4 lines 18-25). Once the amount of data in the transmit buffer is examined in predetermined time intervals, the amount of stored data is compared with

threshold values, and the radio packet data service is provided with a number of plural radio bearers for a predetermined data rate. See column 5 lines 18-55.

Yao is directed to reducing voice latency in a voice-over-data wireless communication system. In *Yao*, data frames are created from audio information by a vocoder and stored in a transmitter queue. Prior to storage, some of the data frames are eliminated, dropped, and are not stored in the queue. In a receiver, data frames are generated from received signals and stored in a queue and are similarly eliminated or dropped. Latency is reduced by the elimination or dropping of the data frames in the transmitter and receiver.

As discussed above, *Yao* is relied upon to disclose the feature of the indication of the length of the data queue is a coded value. However, Applicants submit that careful review of *Yao* reveals that *Yao* merely discloses that the vocoder frame contains a number of information bits depending on the data rate for the particular frame, and that the quality of the communications channel is determined by determining the length of the data queue. For example, if channel quality increases *i.e.*, the length of the queue decreases below a predetermined threshold, frames are dropped at a first rate. On the other hand, if channel quality decreases, *i.e.*, the length of the queue increases above the predetermined threshold, frames are dropped at a second rate. See column 9 lines 57-59 and column 12 lines 6-14 of *Yao*.

Therefore, although the Office Action acknowledges that *Hwang* fails to teach the coded value is an indication of the length of the data queue, Applicants submit *Yao* also

fails to teach, show, or suggest that the coded value is an indication of the length of the data queue, as recited in independent claim 1. Therefore, Applicants submit that *Hwang* and *Yao*, when taken alone or in combination, fail to teach each and every element recited in Applicants' independent claim 1, the independent claim from which claims 2-7 depend. As such, reconsideration and withdrawal of the rejection of claims 1-7 over *Hwang* and *Yao* is respectfully requested.

Claims 8-10, 12, and 13 stand rejected under 35 U.S.C. §103(a) as being obvious over *Yao* (U.S. Patent No. 6,785,262) in view of *Hwang* (EP 0981229 A2). The Office Action took the position that *Yao* teaches each and every element recited in claims 8-10, 12, and 13, except for the allocation being performed in accordance with information transmitted from the first stations, which indicates a need for communications resources based upon the lengths of data queues in the first stations. However, the Office Action cites to *Hwang* as teaching this feature, and as such, the Office Action concluded that it would have been obvious to one of ordinary skill in the art to have combined the teaching of the references to generate Applicants' claimed invention. Applicants traverse the rejection and respectfully submit that the cited combination of references, when taken alone or in combination, fails to teach, show, or suggest each and every limitation recited in claims 8-10, 12, and 13.

Independent claim 8, the independent claim from which claims 9-13 depend, recites a system for controlling communication resources in a network. The system includes a plurality of first stations, a second station connected to the plurality of first

stations through a plurality of communication links, a controller configured to control the allocation of the communication resources among the links, the controller being separate and independent from the first stations, the allocation being performed in accordance with information transmitted from the first stations which indicates a need for communication resources based upon lengths of data queues in the first stations, wherein the information is a coded value of the lengths of the data queues.

Yao and *Hwang* are discussed above. Applicants submit that the combination of *Yao* and *Hwang*, when taken alone or in combination, fails to teach, show, or suggest each and every element recited in claims 8-10, 12, and 13. Specifically, Applicants submit that neither *Yao* nor *Hwang*, when taken alone or in combination, teach, show, or suggest the allocation being performed in accordance with information transmitted from the first stations, which indicates a need for communication resources based upon lengths of data queues in the first stations, wherein the information is a coded value of the lengths of the data queues, as recited in Applicants' independent claim 8. As such, Applicants submit that claim 8 recites subject matter that is not taught, shown, or otherwise suggested by either of the cited references, when the references are taken alone or in combination. Therefore, reconsideration and withdrawal of the rejection of claim 8, along with each claim depending therefrom, is respectfully requested.

Claim 11 stands rejected under 35 U.S.C. §103(a) as being obvious over *Yao* (U.S. Patent No. 6,785,262) in view of *Hwang* (EP 0981229 A2) further in view of *Ishida* (U.S. Patent No. 6,975,262). The Office Action took the position that *Yao* and *Hwang* teach

each and every element recited in claim 11, except for the data generator. However, the Office Action cites to *Ishida* as teaching this feature, and as such, the Office Action concluded that it would have been obvious to one of ordinary skill in the art to have combined the teaching of the references to generate Applicants' claimed invention. Applicants traverse the rejection and respectfully submit that the cited combination of references, when taken alone or in combination, fails to teach, show, or suggest each and every limitation recited in claim 11.

Claim 11 depends from claim 8, which is discussed above. Additionally, *Yao* and *Hwang* are discussed above. *Ishida* teaches a semiconductor integrated circuit including an A/D converter capable of converting an analog signal accepted through an external terminal into a digital signal. The A/D converter includes: a ladder-type resistor for generating a reference voltage; a set of first operational amplifiers, each accepts an output voltage of the ladder-type resistor; a set of first switches, each capable of short-circuiting an input terminal and an output terminal of corresponding one of the first operational amplifiers thereby to allow an offset correction of the corresponding first operational amplifier to be made; and a comparator circuit for comparing an output voltage of each of the first operational amplifiers with the analog signal. The A/D converter can reduce a current output from the ladder-type resistor and speed up charge and discharge of the sampling capacitor.

However, neither of *Yao*, *Hwang*, or *Ishida* teaches, shows, or suggests an allocation being performed in accordance with information transmitted from the first

stations, which indicates a need for communication resources based upon lengths of data queues in the first stations, wherein the information is a coded value of the lengths of the data queues, as recited in Applicants' independent claim 8, the independent claim from which claim 11 depends. As such, Applicants submit that *Ishida* fails to further the teaching of *Yao* and *Hwang* to the level necessary to properly support an obviousness rejection of claim 11. Therefore, reconsideration and withdrawal of the rejection of claim 11 is respectfully requested.

Claim 14 stands rejected under 35 U.S.C. §103(a) as being obvious over *Yao* (U.S. Patent No. 6,785,262). The Office Action took the position that *Yao* expressly teaches each and every element recited in claim 14, except for decoding a code representing a length of a data queue in a mobile station. However, the Office Action concluded that it would have been obvious to one of ordinary skill in the art to have used the decoder discussed in *Yao* to conduct the decoding process to generate Applicants' claimed invention. Applicants traverse the rejection and respectfully submit that the cited reference fails to teach, show, or suggest each and every limitation recited in claim 14.

Applicants' independent claim 14 recites a base station that includes a receiver, a decoder configured to decode a code representative of a length of a data queue in at least one mobile station, and a controller configured to control allocation of communication resources. The decoder provides queue length information for the at least one mobile station to the controller.

Yao is discussed above, and Applicants submit that *Yao* fails to teach, show, or suggest each and every limitation recited in Applicants' claim 14. Specifically, *Yao* does not teach, show, or suggest a decoder providing queue length information for at least one mobile station to a controller, as recited in claim 14. Additionally, claim 14 recites a decoder configured to decode a code representative of a length of a data queue in at least one mobile station, which is not taught, shown, or otherwise suggested by *Yao*. Although *Yao* teaches a decoder, *Yao* does not teach, show, or suggest the additional limitations expressly recited in claim 14 related to the decoder, *e.g.*, a decoder configured to decode a code representative of a length of a data queue in at least one mobile station, as required to properly support a §103 rejection. Therefore, reconsideration and withdrawal of the rejection of claim 14 is respectfully requested.

Claim 15 stands rejected under 35 U.S.C. §103(a) as being obvious over *Yao* in view of *Ishida*. The Office Action took the position that *Yao* teaches each and every element recited in claim 15, except for the data generator. However, the Office Action cites to *Ishida* as teaching this feature, and as such, the Office Action concluded that it would have been obvious to one of ordinary skill in the art to have combined the teaching of the references to generate Applicants' claimed invention. Applicants traverse the rejection and respectfully submit that the cited combination of references, when taken alone or in combination, fails to teach, show, or suggest each and every limitation recited in claim 15.

Applicants' independent claim 15 recites a mobile station comprising a data generator, a data queue, an encoder configured to encode a code representative of a length of the data queue, and a transmitter configured to transmit data with said code included therein as a field.

Yao and *Ishida* are discussed above, however, Applicants submit that *Yao* and *Ishida*, when taken alone or in combination, fail to teach, show, or suggest each and every element recited in claim 15. More particularly, Applicants submit that both *Yao* and *Ishida*, when taken alone or in combination, fail to teach, show, or suggest an encoder configured to encode a code representative of a length of a data queue, as expressly recited in claim 15. Although *Yao* teaches an encoder, the encoder of *Yao* is not taught or disclosed as being configured to encode relative to a length of a data queue. Therefore, Applicants submit that the cited combination of references fails to teach, show, or suggest each and every limitation recited in claim 15, and as such, reconsideration and withdrawal of the rejection of claims 15 is respectfully requested.

Therefore, in conclusion, Applicants submit that each of claims 1-15 recite subject matter that is not taught, shown, or otherwise suggested by the prior art cited in the Office Action, whether the prior art is taken alone or in combination. Therefore, Applicants respectfully request reconsideration and withdrawal of the rejection of claims 1-15. Claims 1-15 are pending and submitted for consideration in this Response.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by

telephone, the Applicants' undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the Applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,

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Enclosures: Petition for Extension of Time